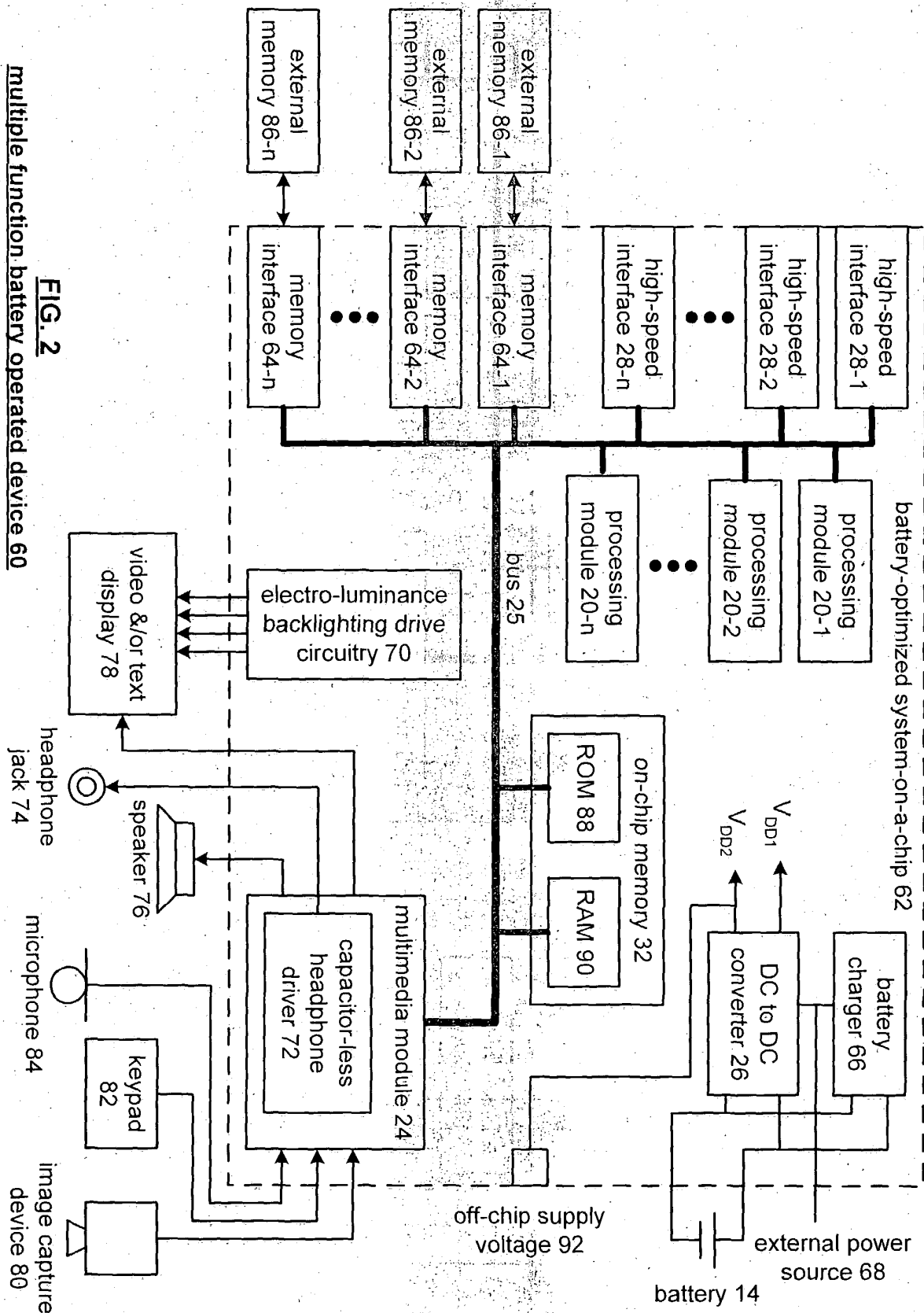
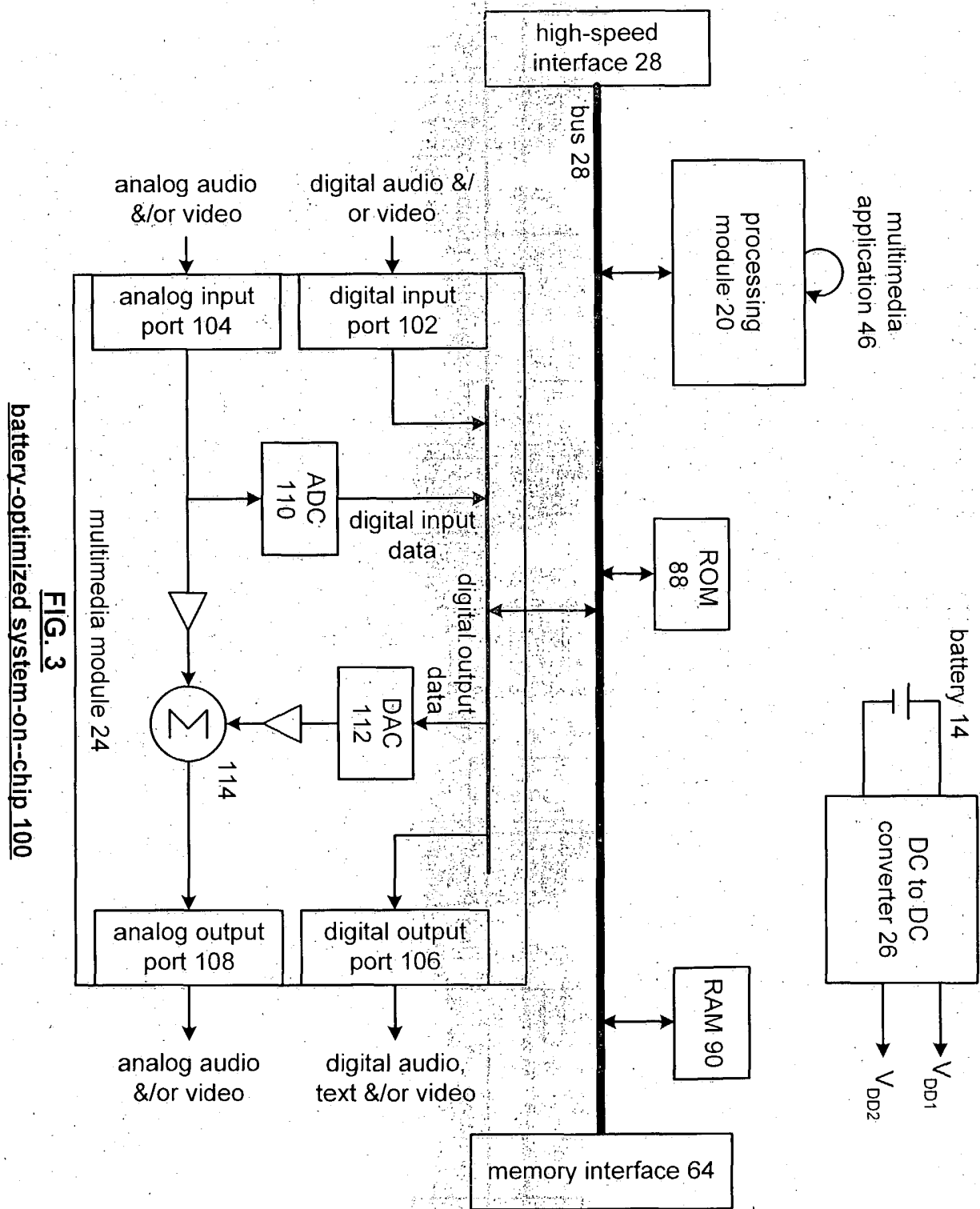


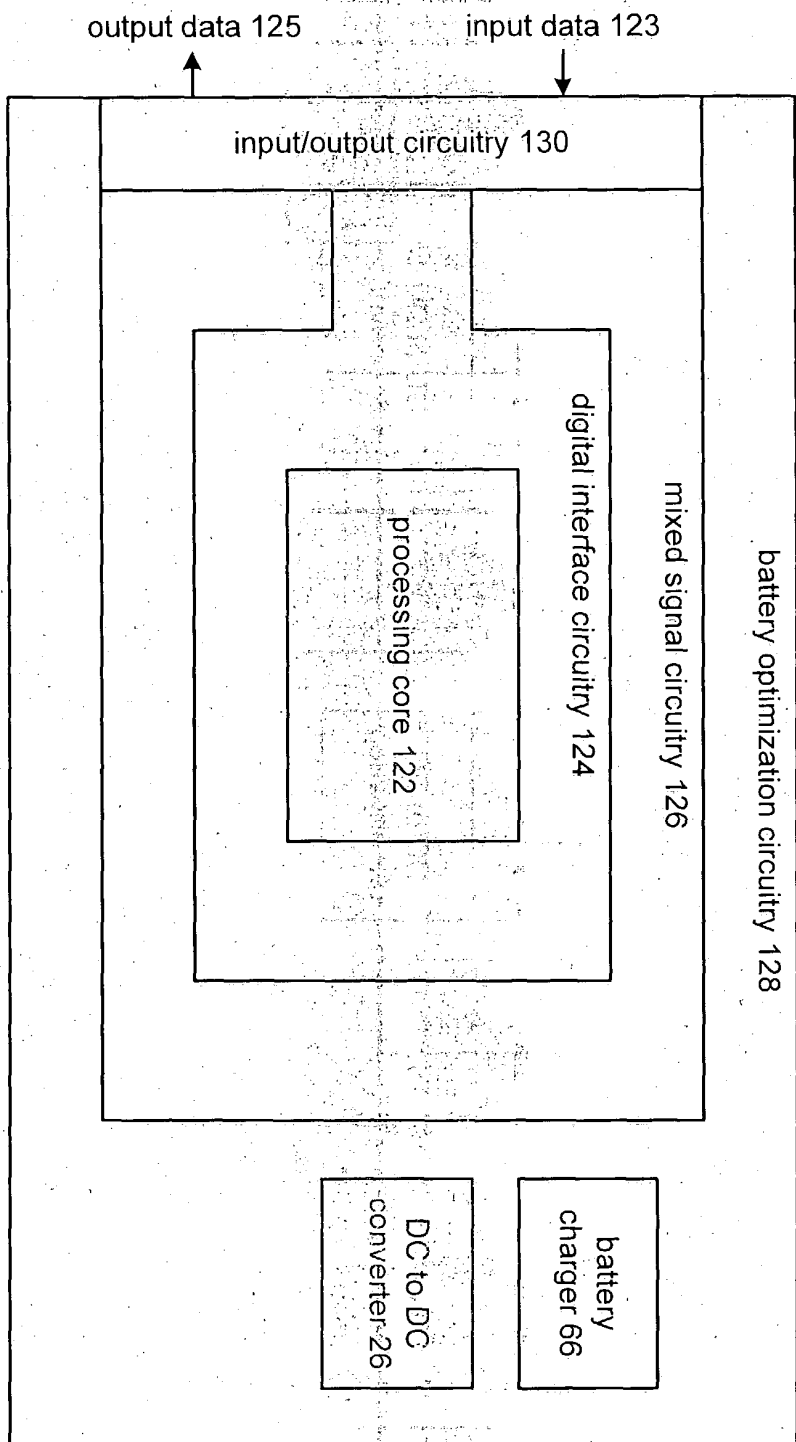
**FIG. 1**



**FIG. 2**  
multiple function battery operated device 60



**FIG. 3**  
battery-optimized system-on-chip 100



**FIG. 4**  
comprehensive system-on-a-chip 120

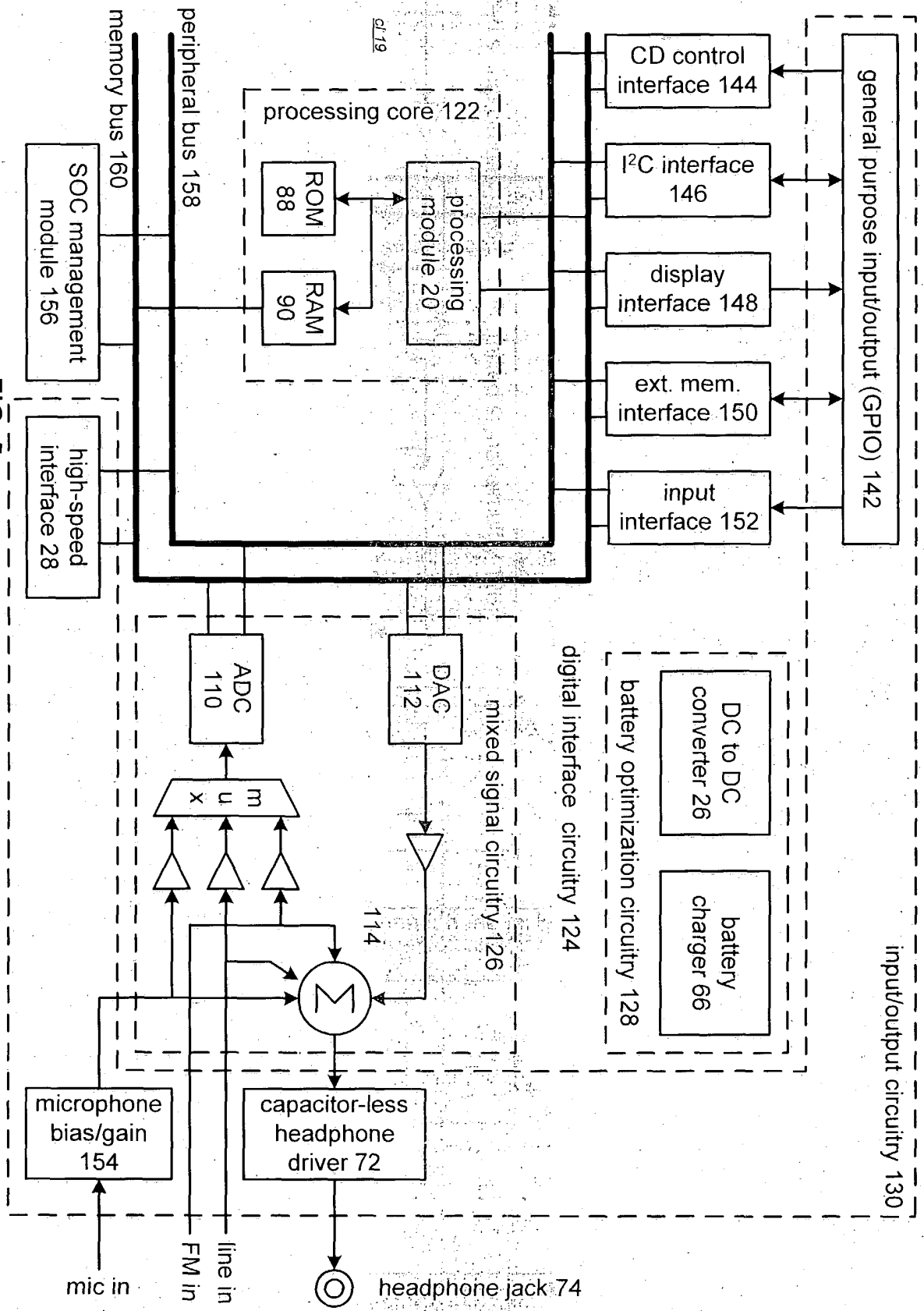
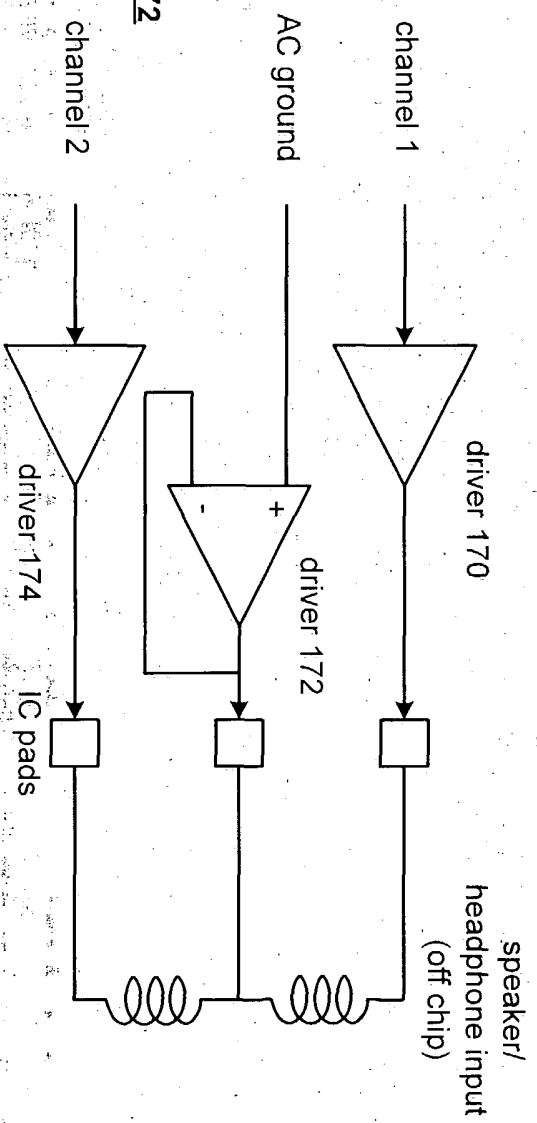
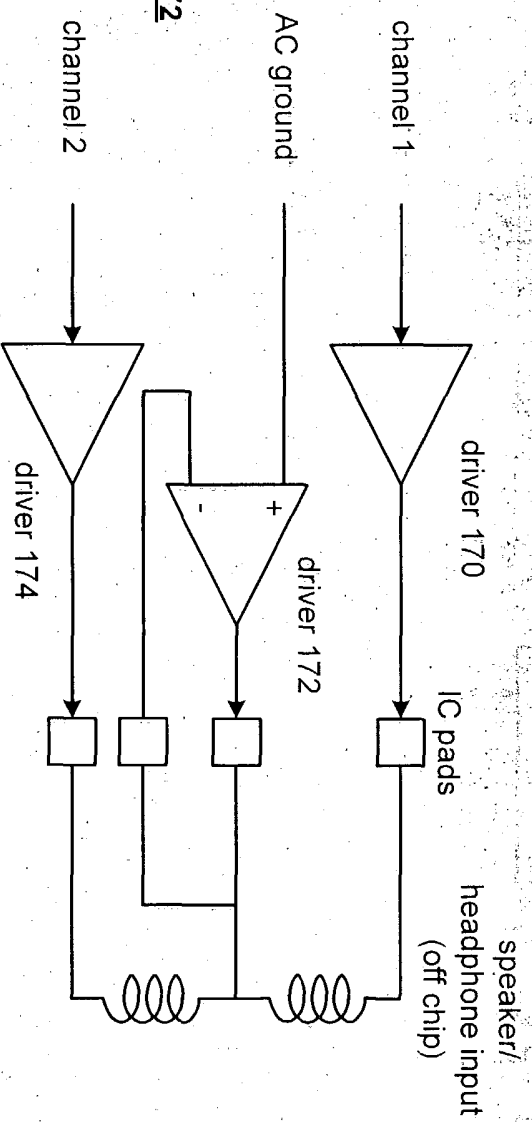


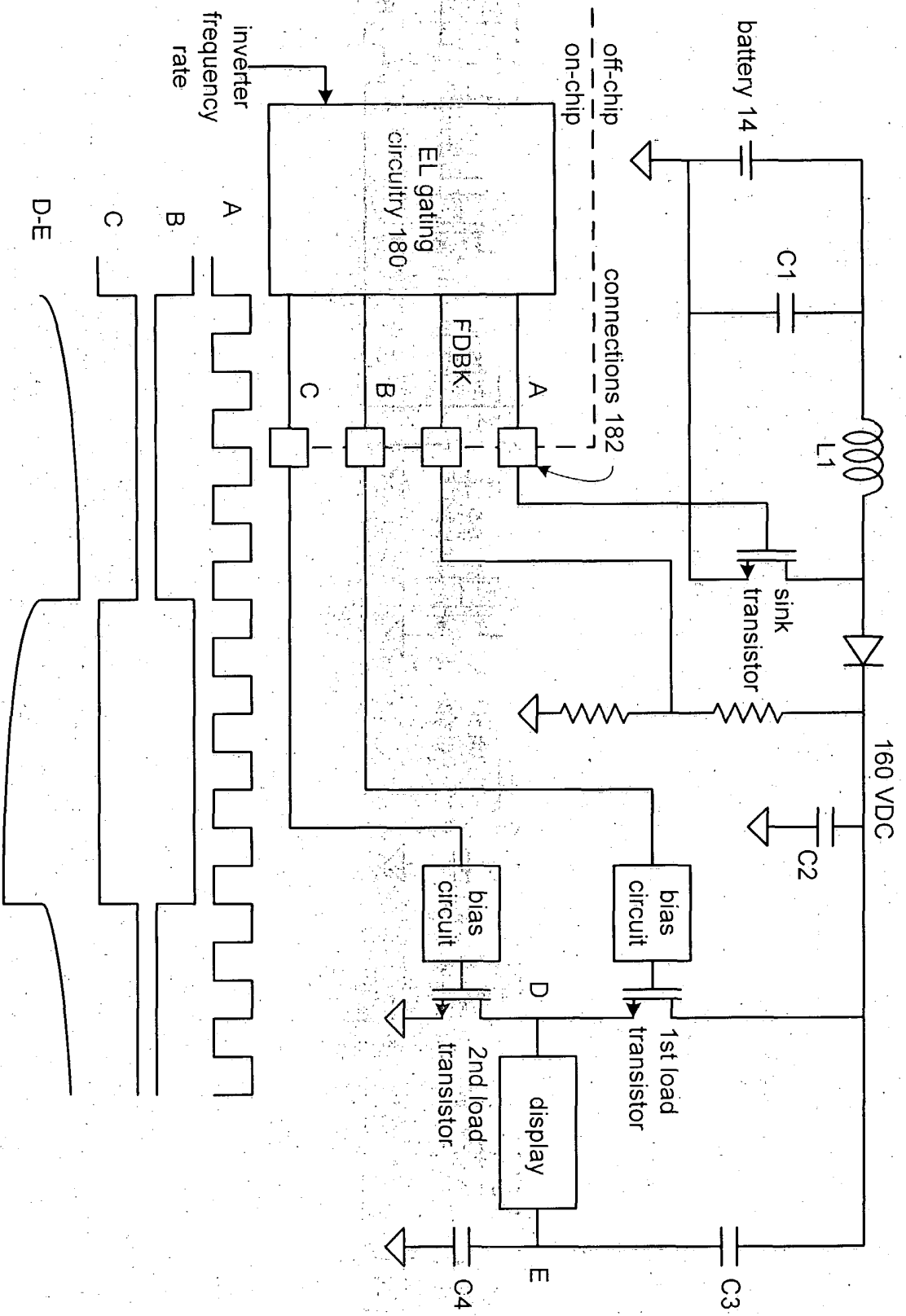
FIG. 5: battery-optimized system-on-a-chip 140

**FIG. 6**  
capacitor-less headphone driver 72



**FIG. 7**  
capacitor-less headphone driver 72





**FIG. 8**  
EL backlighting drive circuitry 70